

### **REMARKS**

This amendment is responsive to the Office Action dated November 18, 2004. Applicants have amended claims 1, 2, 4, 6, 10, 11, 13, 15, 18, 19, 21, 23, 26, 32, 38 and 44-48. Claims 1-49 are still pending.

In the Office Action, the Examiner rejected claims 1-49 under 35 U.S.C. §103(a) as being unpatentable over Marimont (USPN 5,835,099) (hereafter Marimont) in view of Applicants' Admitted Prior Art (AAPA). Applicants respectfully traverse these rejections for at least the reasons advanced in the previous response, and reserve the right to present the original claims in one or more continuation applications and appeal the rejections of such claims to the Board of Patent Appeals.

At this time, however, Applicants have amended various independent claims to clarify that the implicit color commands are *replaced* with the explicit color commands *within the page description file*. Such limitations should have been clear from the originally filed claims. Yet, the Examiner's reliance on the Marimont reference and AAPA suggests some confusion on this point. Therefore, Applicants submit this amendment in the interest of clarification and advancement of the application toward allowance. Applicants believe that this Amendment further clarifies the invention relative to the applied prior art, and even more clearly distinguishes the claimed invention from Marimont and AAPA.

Applicants also respectively submit that many of the independent claims (e.g., claims 44-47) and many of the dependent claims (e.g., claims 2, 11, 19, 27, 33 and 39) specifically preclude raster image processing of the page description file. Thus, these claims not only distinguish AAPA, but are the antithesis of the AAPA relied upon by the Examiner. The Examiner is specifically relying on conventional raster image processing as AAPA in the rejections of claims 1-49, yet claims 2, 11, 19, 27, 33, 39 and 44-47 specifically exclude raster image processing. Thus, these rejections cannot stand.

### **Claims 1, 10, 18, 26, 32, 38 and 48**

Claims 1, 10, 18, 26, 32 and 38 have been amended to clarify that identified implicit color commands within the page description file are converted to explicit color commands such that the explicit color commands replace the implicit color commands within the page

description file. This Amendment is solely for purposes of advancing this application toward issuance. Applicants in no way acquiesce to the former rejections of claims 1, 10, 18, 26, 32 and 38. Previous claim 48 includes a similar limitation insofar as claim 48 recites the replacement of identified implicit color commands within the page description file with the corresponding explicit command within the page description file.

For purposes of brevity, Applicants refer to claim 1 in the following discussion. Similar arguments apply to claims 10, 18, 26, 32, 38 and 48.

Claim 1 recites a method for modification of color values in a page description file, the method comprising identifying at least some implicit color commands within the page description file; and converting the identified implicit color commands within the page description file to explicit color commands such that the explicit color commands replace the implicit color commands within the page description file.

In the Final Office Action, the Examiner rejected claim 1 as being obvious over Marimont in view of AAPA. In particular, the Examiner indicated that AAPA recognizes that image data can be converted to explicit data by a raster image processor. The Examiner then stated that: "identification of implicit color commands within a page description file must be inherently true to (sic) affect the conversion of the admitted prior art."

These characterizations of the AAPA are incorrect. Raster image processing does not inherently include identification of implicit color commands, as the Examiner suggests. Moreover, Applicants have in no way admitted that conventional raster image processing includes an inherent identification of implicit color commands and Applicants have specifically noted the contrary in the previous response.

To be sure, page description file image data, such as data within a .pdf file, may include a wide variety of implicit commands, but only some of these implicit commands may affect color rendering. Moreover, conventional raster image processing occurs without regard to the nature of the commands, and includes execution of all the implicit commands as well as the explicit commands in the page description file to generate a bitmap used to drive an imaging device. Accordingly, during conventional raster image processing, the implicit color commands are not specifically identified, but are executed by a page description file interpreter like the other implicit or explicit commands in order to generate a RIP'ed bit map suitable for driving a printer

or other imaging device. Nothing in conventional raster image processing requires identification of implicit color commands.

As previously outlined on the record, Applicants believe that the Examiner's previous analysis is flawed insofar as the Examiner has indicated that "the identification of implicit color commands within a page description file must be inherently true to affect (sic) the conversion of the admitted prior art." This simply is not the case. Again, raster image processing typically occurs without regard to the nature of the commands, and includes execution of all the implicit commands as well as the explicit commands to generate a bitmap used to drive an imaging device.

Marimont fails to disclose or suggest the inventions defined by Applicants' claims, and provides no teaching that would have suggested the desirability of modification of anything in the prior art in order to arrive at the inventions recited in Applicants' claims. For example, contrary to requirements of the claimed invention, Marimont does not disclose or suggest a technique involving identifying implicit color commands within a page description file and converting them to explicit color commands. Moreover, Marimont lacks any suggestion of replacing the implicit color commands within a page description file with explicit color commands.

Marimont describes space-color separable (SCS) models, and does not even include any discussion of page description files, much less a suggestion of the techniques of Applicants claims, which require identifying implicit color commands within a page description file and converting them to explicit color commands. Moreover, to the extent that Marimont creates SCS models, this appears to be the creation of totally different models, and not the replacement of commands within a page description file, as required in amended claims 1, 10, 18, 26, 32, 38 and 48.

As noted in the previous response, the Examiner appears to rely upon Marimont merely to demonstrate that implicit color commands were known in the prior art. In particular, the Examiner appears to be stating that the Space-Color Separable (SCS) model of Marimont makes use of implicit color commands. With respect to implicit color commands, however, Marimont teaches the exact opposite of Applicants' claimed invention. For example, the creation of SCS models appears to involve the creation of parametric functions from explicit commands, and not

the replacement of implicit color commands with explicit color commands. Whereas Applicants' claims recite the conversion and replacement of implicit color commands to explicit color commands within a page description file, Marimont teaches the creation of parametric functions in an SCS model from explicit color commands, which does not occur within a page description file.

Moreover, Marimont discloses SCS models in order to provide compactness, while still preserving the acceptable appearance of colors during editing operations. See column 3, lines 22-47. Accordingly, any conversion of implicit color commands to explicit color commands, as recited in Applicants' claims, would appear to be contrary to Marimont's stated goal of compactness insofar as explicit commands are recognized as being less compact than implicit commands. Moreover, Marimont also lacks any appreciation of the color correction advantages that can be achieved by the conversion of implicit color commands within the page description file to explicit color commands.

The amendment to claims 1, 10, 18, 26, 32 and 38 should make the distinctions between Marimont and AAPA, and the claimed invention more clear for the Examiner. In particular, Applicants have clarified that the identification and conversion of the implicit color commands specifically occurs *within the page description file*. More specifically, claims 1, 10, 18, 26, 32 and 38 have been amended to clarify that the implicit color commands are *replaced* within the page description file with explicit color commands within the page description file. Similar limitations were previously included in claim 48.

Again, Marimont fails to disclose any technique involving the identification of implicit color commands and the conversion of the implicit color commands to explicit color commands. In the passages cited by the Examiner, in particular, Marimont clearly does not refer to identifying implicit color commands nor converting such commands to explicit color commands. Accordingly, Marimont lacks any suggestion of the identification, conversion and replacement of implicit color commands within a page description file as required by claims 1, 10, 18, 26, 32, 38 and 48.

Moreover, Applicants again note that Marimont appears to teach the exact opposite of Applicants' claimed invention. For example, the SCS models described in Marimont appear to teach the creation of implicit color commands (in the form of parametric functions) from explicit

commands, which is the exact opposite of the features recited in Applicants' claims. In this sense, Marimont would complicate, rather than simplify the color correction goals and the features of Applicants' invention, e.g., such as the modification of color values specified by the explicit color commands, as recited in dependent claim 3. In any case, Marimont also lacks any suggestion of command replacement within any file, much less the replacement of implicit color commands with explicit color commands within a page description file.

In the Final Office Action, the Examiner attempted to refute Applicants' assertion that Marimont teaches the exact opposite of Applicants' claimed invention. The Examiner stated that Marimont teaches in column 3, lines 29-31 "that smooth shading, an implicit color representation, can be mathematically modeled." The Examiner then stated that column 7, lines 5-13, of Marimont teaches that parametric functions approximate colors in an image region. The Examiner concluded that the evaluation of functions for each region is "essentially defining an explicit color for that region." Based on these observations of unrelated passages of Marimont, the Examiner stated that Marimont does not teach away from the claimed invention.

Applicants dispute these assertions and observations of the Examiner. The Examiner's characterization of Marimont is plainly incorrect. Parametric functions are not explicit color commands, as the Examiner's comments might suggest. In particular, parametric functions do not explicitly specify a color. Instead, they are functions that rely on input parameters to produce a color value; hence, they are implicit color commands. Moreover, whether or not the evaluation of functions defines an explicit color bears no relevance on whether or not such functions are explicit. Both implicit and explicit commands can define color for a region. As outlined in Applicants specification, and explained a number of times to the Examiner on the record, an implicit color command specifies color values indirectly, whereas an explicit color command assigns an explicit color value to an object or region in an image. Parametric functions are not explicit color commands insofar as they do not assign an explicit color value to an object or region. On the contrary, parametric functions in the SCS models of Marimont appear to be implicit color commands as they specify color indirectly by way of a function.

Furthermore, whether or not Marimont discloses implicit and explicit commands is not the dispositive issue. Applicants have pointed out that to the extent that Marimont discloses implicit and explicit commands, Marimont teaches the opposite of Applicants' claims, i.e., the

creation of parametric functions from explicit commands, not the conversion of implicit commands to explicit commands within a page description file. This is clearly the teaching of Marimont with respect to the SCS models, to the extent such models can be considered analogous to color commands. The Examiner has offered no probative evidence that would refute Applicants' assertion that Marimont does not teach the conversion of implicit command to explicit commands within a page description file.

Applicants have also noted that the creation of SCS models would complicate color correction. Many of Applicants' dependent claims (such as claim 3) recite the modification of color values specified by the explicit commands. The teaching of Marimont would appear to undermine such modification to color values specified by the explicit commands, insofar as Marimont creates SGS models, not explicit color commands.

In addition to these deficiencies, Applicants again submit for the record that the Examiner has failed to identify any motivation in the prior art that would have led a person with skill in the art to modify Marimont with AAPA. In other words, even if one accepts the premise of the Examiner with respect to AAPA and further ignores the fact that Marimont teaches the opposite of Applicants' claimed invention, the prior art still lacks any motivation that would have led a person with ordinary skill in the art modify Marimont in view of AAPA in order to arrive at the claimed invention. On the contrary, Marimont specifically motivates against the conversion of implicit color commands within the page description file to explicit color commands, as recited in Applicants' claims, insofar as Marimont teaches the creation of SGS models that rely on implicit functions to improve compactness of the file. Also, AAPA does not operate within a page description file, as the Examiner has recognized that raster image processing generates a new bitmapped format. Once a page description file is RIP'ed, the bitmap takes the place of the page description file.

Notwithstanding the foregoing observations regarding the many deficiencies of Marimont and AAPA with respect to Applicants' claims, Applicants again note that claims 1, 10, 18, 26, 32 and 38 have been amended to further clarify that the identification and conversion of the implicit color commands specifically occurs *within the page description file*. More specifically, claims 1, 10, 18, 26, 32 and 38 have been amended to clarify that the implicit color commands are

*replaced* within the page description file with explicit color commands within the page description file. Similar limitations were previously included in claim 48.

Neither Marimont nor AAPA discloses or suggests the replacement of implicit commands within a page description file with explicit commands within the page description file. Marimont does not even discuss page description files, but describes the creation of SGS models. Nothing in Marimont suggests replacement of commands within any file, much less the replacement of implicit commands within a page description file with explicit commands within the page description file. Moreover, the Examiner's own analysis of AAPA recognizes that raster image processing generates a new bitmapped format. Thus, AAPA also clearly lacks any suggestion the replacement of implicit commands within a page description file with explicit commands within the page description file. On the contrary, if a page description file is raster image processed, a new bitmapped format is created, not a modified page description file.

In view of the amendments to claims 1, 10, 18, 26, 32 and 38, and the forgoing arguments, Applicants respectfully request reconsideration by the Examiner and allowance of these claims, as well as independent claim 48 and the respective dependent claims that depend from these claims.

**Claims 2, 11, 19, 27, 33, 39 and 44-47**

Independent claims 44-47 and dependent claims 2, 11, 19, 27, 33 and 39 specifically preclude raster image processing of the page description file. In this sense, these claims are the antithesis of the AAPA relied upon by the Examiner. Claims 44-46 have been amended for reasons unrelated to patentability. In particular, claims 44-46 have been amended to define the acronym used in those claims for purposes of further clarity.

In the Final Office Action, the Examiner specifically relied on conventional raster image processing as AAPA in the rejections of claims 1-49, yet claims 2, 11, 19, 27, 33, 39 and 44-47 specifically exclude raster image processing from the steps recited in those claims. Thus, these rejections of claims 2, 11, 19, 27, 33, 39 and 44-47 cannot stand, as the limitations of these claims are in direct conflict with the AAPA relied upon by the Examiner.

In short, claims 2, 11, 19, 27, 33, 39 and 44-47 specifically exclude raster image processing. Therefore, the Examiner's reliance on raster image processing as AAPA in rejecting

these claims lacks any justification, and appears to defy reason. The Examiner, quite simply, cannot rely on raster image processing as teaching anything pertinent to a technique that precludes such raster image processing. AAPA is in direct conflict with the features recited in claims 2, 11, 19, 27, 33, 39 and 44-47, and the rejections of these claims based on AAPA must be withdrawn.

### **Scheduled Interview**

The Examiner has courteously agreed to a personal interview on March 1, 2005. Applicants' representatives, Kelly Patrick Fitzgerald and Steven J. Shumaker, look forward to the interview as an opportunity to further explain Applicants' position, and discuss the Examiner's analysis of the claimed invention relative to the prior art.

### **Conclusion**

In the Final Office Action, the Examiner reiterated that identification of implicit color commands within a page description file by a raster image processor to generate an explicit bitmap file is necessary in order to execute, or effect the conversion of a page description language containing an implicit command into an explicitly defined bitmapped format. This assertion by the Examiner is simply incorrect.

As outlined above and previously explained to the Examiner, raster image processing occurs without regard to the nature of the commands, and includes execution of all the implicit commands as well as the explicit commands to generate a bitmap used to drive an imaging device. Thus, any specific identification of the implicit commands, as such, does not occur. In general, no specific commands are identified in conventional raster image processing since all of the commands are executed without any identification of the type of command being executed.

In any case, Applicants hope that the current amendments to claims clarify for the Examiner, the distinction between claims 1, 10, 18, 26, 32, 38 and 48 and the AAPA and Mairimont. Raster image processing generates a bitmapped format, as noted by the Examiner, and not a page description file. Claims 1, 10, 18, 26, 32, 38 and 48, in contrast, require the identification and replacement of implicit color commands within the page description file.



With regard to independent claims 44-47 and dependent claims 2, 11, 19, 27, 33 and 39, which specifically preclude raster image processing of the page description file, Applicants note that the Examiner's comments specifically rely on raster image processing in the various rejections. The rejections of claims independent claims 44-47 and dependent claims 2, 11, 19, 27, 33 and 39, cannot be predicated on the existence of conventional raster image processing, as these claims preclude raster image processing of the page description file.

For at least the reasons stated above, Applicants believe that the Examiner has failed to establish a *prima facie* case of obviousness with respect to any of the independent claims. Moreover, Applicants believe that many, if not all, of the dependent claims recite numerous additional features that are clearly lacking from the applied references. Accordingly, Applicants in no way acquiesce to any of the Examiner's characterizations of the prior art with respect to the dependent claims, and neither admit nor acquiesce in the grounds of rejections advanced by the Examiner. Applicants reserve further comment on the dependent claims, or other features of the independent claims.

Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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